Remarks and Arguments

Claims 1-26 and 31-35 have been presented for examination. Claims 1-6, 11, 17-18, 21, 31-34 have been amended. Claims 7-10, 14-16, 22-30 and 35 have been canceled.

Claim 14 has been objected to for reciting "Apparatus used..." in line 1 instead of "An apparatus used..." Claim 14 has been canceled rendering this objection moot, but claim 31 which contains similar wording has been corrected along the lines suggested by the examiner.

Claims 1-6, 11-26 and 31-35 have been rejected under 35 U.S.C. §112, second paragraph, as indefinite for using the term "the credential descriptor" in claim 1, line 9 and in claims 2, 3, 4, 5 and 6. The examiner found this multiple recitation confusing since it was not clear to which credential descriptor these multiple recitations referred.

In response, claims 1-6 have been amended to clarify the credential descriptors to which each claim refers. For example, claim 1 has been amended to specify "providing to a first credential builder ... a first credential descriptor that describes a plurality of credentials ... sending a second credential descriptor that describes at least one credential described in the first credential descriptor, but not built by the first credential builder from the first credential builder to a second credential builder included in a second device connected to the network; and using the second credential builder to attempt to build the at least one credential described by the second credential descriptor ... ". Therefore, it is clear that two separate credential descriptors are recited in claim 1.

Claim 2 has been amended to recite "evaluating the built credentials ... to determine whether the built credentials satisfy the first credential descriptor for the device. Thus, claim 2 has been clarified as to which credential descriptor is recited.

Claim 3 now recites "evaluating the built credentials by using the credential evaluator to determine whether the built credentials satisfy the first credential descriptor for the device." therefore claim 3 clearly refers to the first credential descriptor.

Further, claim 4 recites "sending a third credential descriptor that describes at least one credential not built in the second building step from the second credential builder to the first credential builder ..." Thus, claim 4 is now clear.

Claim 5 recites sending a third credential descriptor that describes at least one credential not built by using either the first or the second credential builder from the second credential builder to a third credential builder ... and using the third credential builder to attempt to build at least one credential described by the third credential descriptor." Claim 5 is also now clear.

Finally, claim 6 now recites "generating the first credential descriptor for the device" and is also clear.

Claims 11-16 and 31-35 have been rejected under 35 U.S.C. §112, second paragraph, for reciting "an input set or zero or more credentials." The examiner comments that it is unclear what is included with an input set with zero credentials. In response claims 11, 17 and 21 have been amended to delete the phrase "zero or more" thereby clarifying these claims. The remaining claims that used this phrase have been canceled.

Claims 1-26 and 31-35 have been rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 5,546,523 (Gatto.) The examiner reads the authentication devices disclosed in <u>Gatto</u>, such as the fingerprint reader and card reader on the credential builders recited in the claims and that the credentials built (the outputs of the devices) are then combined as necessary by either the local controller 11 or the central controller 200 of the <u>Gatto</u> system. Thus, the overall credential "chain" is built by a controller. The credentials required in this chain and the order in which the credentials are built are fixed at the time the controller software is written.

In contrast, the present invention relates to a more dynamic system than that disclosed in Gallo. In the present system, the credential evaluators are each a chain of builders, which chain is dynamically configured chain based on a credential descriptor. Further, if a credential builder cannot build all necessary credentials, it sends a new credential descriptor to another builder which then effectively concatenates its builder chain with the chain of the first builder. For

example, amended claim 1 recites "providing, to a first credential builder included in a first device connected to the network, a first credential descriptor that describes a plurality of credentials and configuring the first credential builder based on the first credential description to build at least one of the credentials described by the first credential descriptor ..." Gatto discloses that the type and order of the credential builders is fixed in the controller software.

Amended claim 1 further recites "sending a second credential descriptor that describes at least one credential described in the first credential descriptor, but not built by the first credential builder from the first credential builder to a second credential builder included in a second device connected to the network ..." In Gatto, all credentials are sent to a central location, which is either the local or central controller; credentials are not sent between credential builder devices such as the fingerprint reader and card reader.

Claim 1 further recites "configuring the second credential builder based on the second credential description to build at least one of the credentials described by the second credential descriptor ..." As noted above, none of the credential builders in Gatto are configured based on inputs from other credential builders.

Consequently, amended claim 1 patentably distinguishes over the cited <u>Gatto</u> reference. Claim 2-6 are dependent on amended claim 1 and incorporate the limitations thereof. Consequently, they distinguish over the cited <u>Gatto</u> reference in the same manner as amended claim 1. In addition, these claims recite further limitations not taught in <u>Gatto</u>. For example, claim 4 recites "sending a third credential descriptor that describes at least one credential not built in the second building step from the second credential builder to the first credential builder ..." Again, <u>Gatto</u> does not disclose sending credential descriptors from credential builder to credential builder. Claim 5 recites sending a third credential descriptor that describes at least one credential not built by using either the first or the second credential builder from the second credential builder to a third credential builder ..." and distinguishes over the cited <u>Gatto</u> reference in the same manner as claim 4.

Claims 11, 17, 21 and 32-34 have been amended to particularly specify the dynamic nature of the credential builder chains. For example, claim 11 has been

amended to recite that the credential builders in the chain are "dynamically selected based on credential descriptors in the master credential descriptor and being linked in a series based on credential descriptors in the master credential descriptor ..." As mentioned above, <u>Gatto</u> does not teach dynamic selection and linking of credential builders.

Claims 12 and 13 are dependent on amended claim 11 and incorporate the limitations thereof. Consequently, they distinguish over the cited <u>Gatto</u> reference in the same manner as amended claim 11.

Claims 17, 21, and 32-34 contain similar wording to amended claim 11. For example, claim 17 recites "dynamically adding at least one different credential builder to the master credential builder based on credential descriptors in the master credential descriptor to form a modified master credential builder in such a manner that the credential builders are so linked in a series ..." Claim 21 recites "dynamically removing at least one of the credential builders from the master credential builder based on the credential descriptors in the master credential descriptor to form a modified master credential builder ..." Consequently, these claims distinguish over the cited <u>Gatto</u> reference in the same manner as amended claim 11.

Claims 18-20 are dependent on amended claim 17 and incorporate the limitations thereof. Consequently, they distinguish over the cited <u>Gatto</u> reference in the same manner as amended claim 17.

Claim 31 has been amended in a manner similar to amended claim 1 and, consequently, distinguishes over the cited <u>Gatto</u> reference in the same manner as amended claim 1.

In light of the forgoing amendments and remarks, this application is now believed in condition for allowance and a notice of allowance is earnestly solicited. If the Examiner has any further questions regarding this amendment, he is invited to call Applicants' attorney at the number listed below. The Examiner is hereby authorized to charge any fees or direct any payment under 37 C.F.R. 1.17, 1.16 to Deposit Account number 02-3038.

Respectfully submitted

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